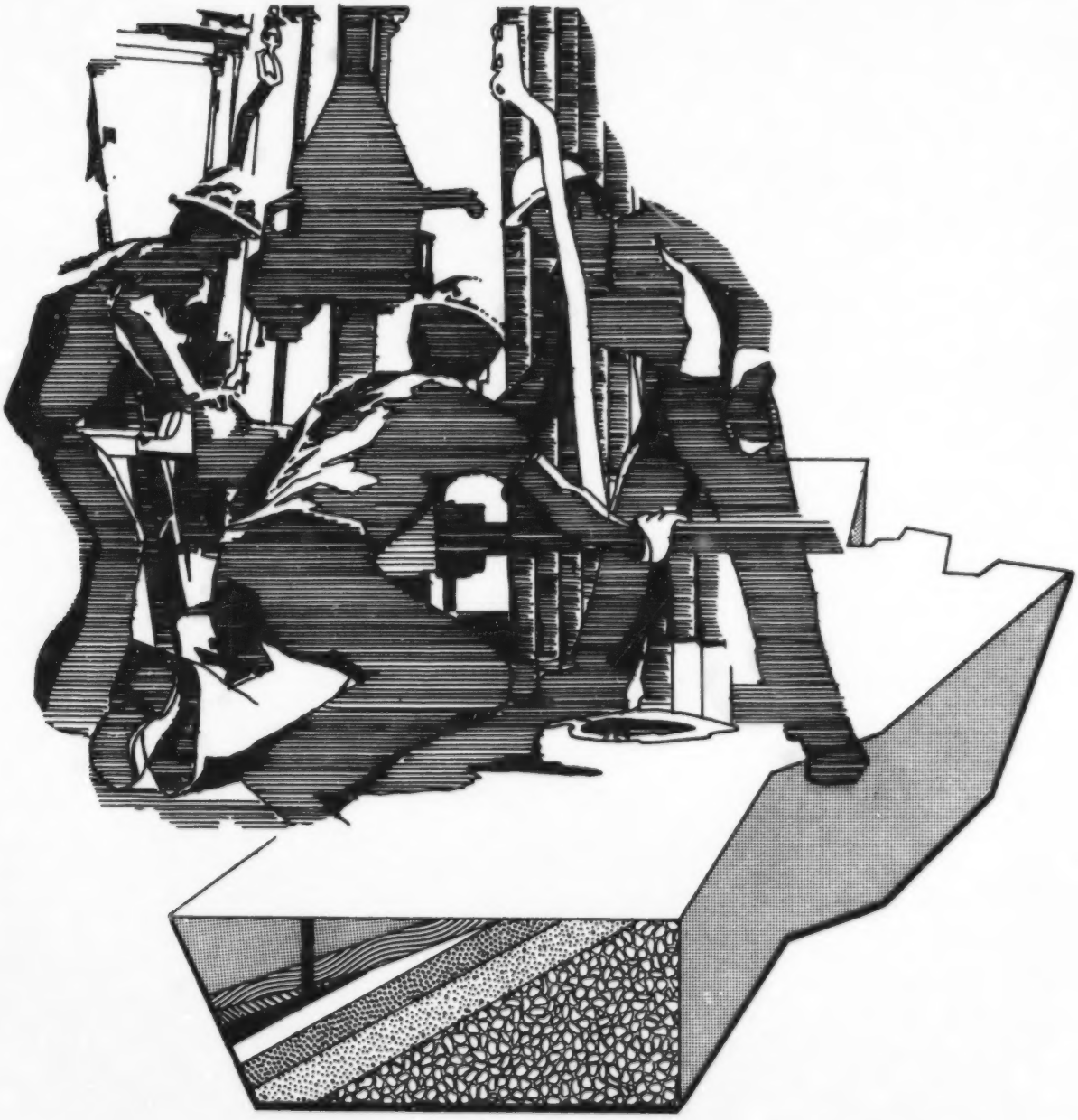
OIL ACTIVITY REVIEW 1983



Manitoba
Energy and Mines
Petroleum

Manitoba Oil Activity Review
1983

March 1984

Manitoba
Energy & Mines
Petroleum

1983 Highlights

- During 1983, 247 wells were drilled in Manitoba, the highest number in 27 years and a 27% increase over 1982 (195 wells).

- Manitoba's annual oil production increased for the second consecutive year to 738 300 m^3 (4.65 million barrels), also representing a 27% increase over 1982.

- The value of oil exceeded $152 million, a 52% increase over 1982 due mainly to increased production and higher "old" oil prices.

- Provincial revenues collected from the oil industry (royalties, oil taxes, lease sales, lease rentals and oil export taxes) increased to $21.7 million during 1983, representing a 26% increase over 1982 ($17.2 million).

- Gross royalties payable to freehold mineral owners were estimated at more than $16 million in 1983 (Federal and Provincial tax liabilities not excluded).

- Municipal taxes on oilfield equipment and pipelines were assessed at over $5 million.

- Oil industry expenditures in Manitoba were estimated to be $114 million in 1983, a 38% increase over 1982.

- Fourteen geophysical licenses were issued in 1983. Seismic programs covered a record setting 3 875 kilometres at an estimated cost of $4.2 million, a 132% increase over 1982 ($1.81 million).

- Two sales of Crown oil leases and exploration reservations covering 10 279 hectares generated $1,100,427 in revenue to the province in 1983.

- Estimates of remaining established crude oil reserves continued to increase in 1983 to 8.15 million m^3 (51.3 million barrels) of oil, mainly due to continued development of the Waskada area.

- In 1983, The Oil and Natural Gas Conservation Board passed orders designating 10 Oil Fields and 60 non-confidential Oil Pools.

- A waterflood pressure maintenance project was approved and implemented in portions of the new Waskada Lower Amaranth A Pool by Omega Hydrocarbons during 1983.

- The Oil and Natural Gas Conservation Board received and reviewed applications from four pipe line companies vying to build the Waskada-Cromer Crude Oil Pipe Line.

- In June, the Minister of Energy and Mines announced the opening of a new District Petroleum Branch Office in Waskada, Manitoba.

- The Oil and Natural Gas Conservation Board approved a plan by Omega Hydrocarbons Ltd. to construct a $2.5 million gas liquids recovery plant in the Waskada oil field, the first of its kind in Manitoba.

- Bill 5, The Surface Rights Act, was passed by the Legislature on June 21, 1983. A six-member Surface Rights Board was appointed and a Board office was established in Virden. The Board's principal function is to arbitrate disputes between the petroleum industry and landowners regarding the use of land for petroleum exploration and development and related operations.

- Five potash test holes were drilled in the Russell-Binscarth area in 1983.

- Bill 4, The Manitoba Oil and Gas Corporation Act, was passed by the Legislature on June 21, 1983. On December 29, 1983, Mr. John Sadler was appointed President and Chief Executive Officer of the Corporation.

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Crown Oil and Natural Gas Lease Sales

Two Crown oil and natural gas lease sales were held in 1983. Sixty-six leases covering 9 255 hectares were sold for a total of $1,058,705.

In the first lease sale, held on May 11, 1983, the average bonus price paid per hectare was $146.73, whereas in the October 12, 1983 sale, the average bonus price decreased to $84.24 per hectare.

The highest price in the May sale was $762.34 per hectare paid by Pipestone Petroleum Inc. for a 64 hectare parcel in the Lyleton area. The highest price per hectare in the October sale was paid by Geoffrey Michael Papero ($520.00 per hectare) for a 64 hectare parcel located approximately 10 km southwest of St. Lazare. Neither of these prices exceeded the records set in 1982.

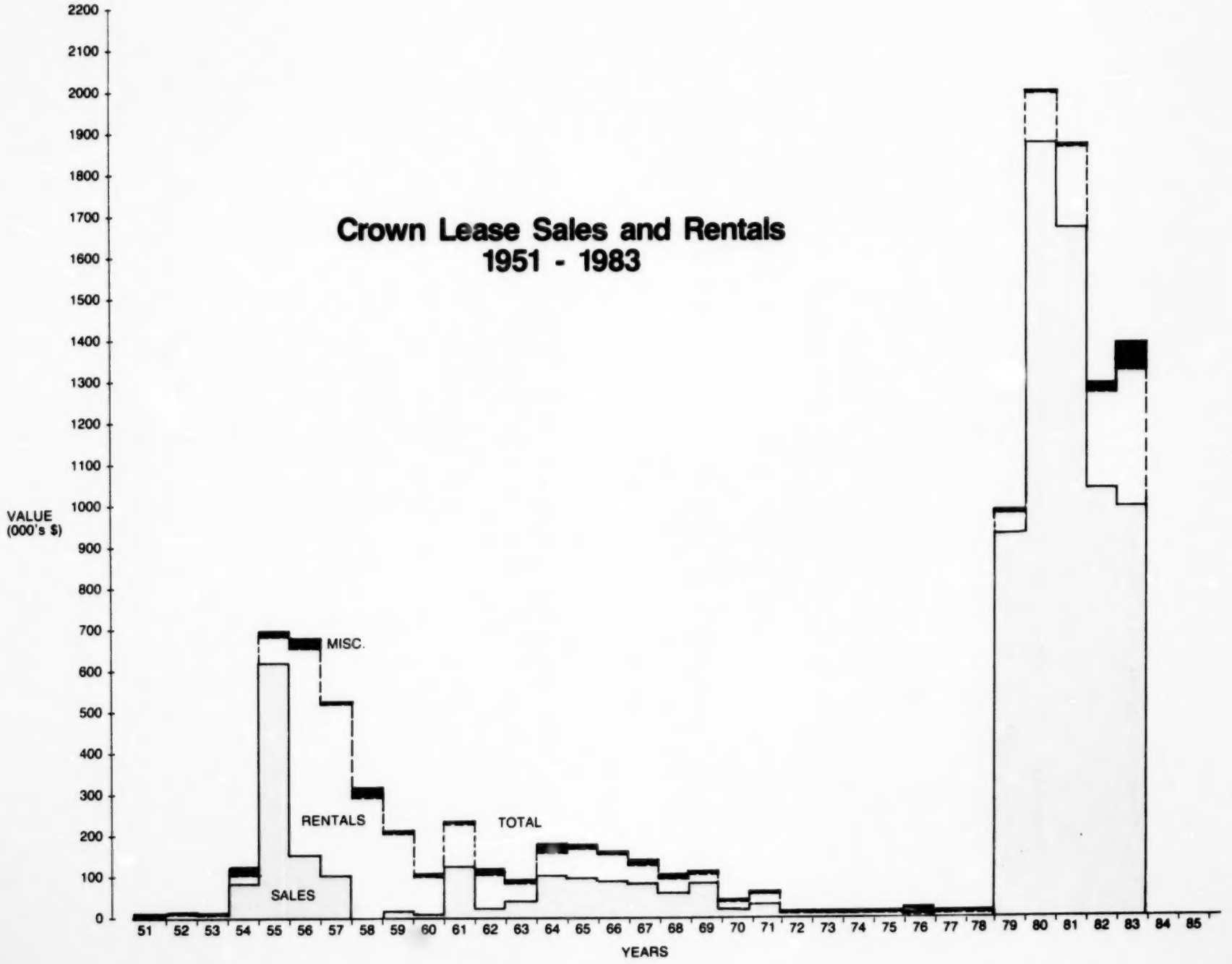
Only one exploration reservation was sold in 1983. In the May sale a 1 024 hectare reservation was purchased by Andex Oil Company Ltd. and Omega Hydrocarbons Ltd. for $41,722. This was the first exploration reservation sold since the October 28, 1981 land sale when 4 exploration reservations were sold.

Since Crown oil and gas lease sales resumed in 1979, the province has received $6,816,795 in revenue from the disposition of Crown oil leases and exploration reservations. (refer to table for individual sale statistics).

MANITOBA OIL LEASE SALE STATISTICS

1979-1983

	LEASES						EXPLORATION RESERVATIONS						
SALE DATE	NO. OF LEASES SOLD	AREA (ha)	BONUS ($)	AVG.PRICE ($/ha)	HIGHEST PRICE ($/ha)	LEASE REVENUE ($)	NO. OF EXPL.RES. SOLD	AREA (ha)	BONUS ($)	AVG. PRICE ($/ha)	HIGHEST PRICE ($/ha)	RESERVATON REVENUE ($)	TOTAL VALUE ($)
April 19, 1979	42	6 200	493,641.30	79.62	277.50	511,241.30	3	4 736	40,888.00	8.63	12.23	47,588.00	558,829.30
Sept. 6, 1979	44	4 864	404,743.60	83.11	215.17	419,103.60	-	-	-	-	-	-	419,103.60
March 5, 1980	38	6 204	426,553.50	68.75	267.34	443,963.50	6	19 408	746,463.20	56.53	100.31	764,468.20	1,208,431.70
July 23, 1980	18	2 432	224,698.82	92.39	139.75	231,678.82	2	2 368	73,882.00	31.20	31.20	77,342.00	309,020.82
Oct. 29, 1980	24	3 904	406,277.52	104.06	470.51	417,237.52	-	-	-	-	-	-	417,237.52
May 13, 1981	38	6 269	589,615.58	94.05	257.26	607,188.08	1	1 280	207,718.40	162.28	162.28	209,568.40	816,756.48
Oct. 28, 1981	47	6 043	485,342.76	80.31	252.50	502,800.26	4	4 096	403,480.32	98.51	178.43	409,600.32	912,400.58
May 21, 1982	30	3 184	420,788.43	132.16	835.94	430,248.43	-	-	-	-	-	-	430,248.43
Oct. 27, 1982	26	3 264	634,879.52	194.51	938.88	644,339.52	-	-	-	-	-	-	644,339.52
May 11, 1983	34	4 043	593,209.24	146.73	762.34	605,016.74	1	1 024	40,192.00	39.25	39.25	41,722.00	646,738.74
Oct. 12, 1983	32	5 212	439,057.91	84.24	520.00	453,687.91	-	-	-	-	-	-	453,687.91
TOTAL	373	45 419	5,118,308.15	112.69	938.88	5,266,505.68	17	32 912	1,512,623.90	45.96	178.43	1,550,288.92	6,816,794.60


Crown Lease Sales and Rentals
1951 - 1983
VALUE
(000's $)
2200
2100
2000
1900
1800
1700
1600
1500
1400
1300
1200
1100
1000
900
800
700
600
500
400
300
200
100
0
MISC.
RENTALS
TOTAL
SALES
51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85
YEARS

Crown Oil and Natural Gas Leases

As of December 31, 1983, the total area of Crown oil and natural gas rights under disposition was 71 958 hectares. Of this total, 57 462 hectares were held under lease and 14 496 hectares were held under exploration reservations.

On December 31, 1982, deeper rights renewal provisions came into effect for pre-1979 leases. Under these provisions, non-productive areas and rights below the producing formation revert to the Crown at the end of the lease term. Up to December 31, 1983, these regulatory termination provisions resulted in 3 644 hectares being terminated. These cancelled rights again become available for leasing by other parties interested in actively developing them. A lease may be extended for further periods of one year if a rental penalty is paid and a commitment to a drilling program is made. In 1983, two such leases were extended.

Oil and natural gas leases have initial terms of five years. Because five years have passed since lease sales were resumed in 1979, 1984 will be the first year that post-1978 lease holders must surrender non-productive leases or apply for one-year extensions by paying rental penalties and committing to drilling programs. As a result there will either be increased drilling activity or leases will be surrendered and again made available to other interested parties.

Freehold Mineral Owner's Leasing and Revenue

Approximately 80% of the mineral rights in southwestern Manitoba are privately owned (freehold). There is keen competition among companies to negotiate new leases with freehold

mineral owners in areas of current interest where leases have expired or where mineral rights are not presently leased. Freehold mineral owners receive revenue from signing bonuses, delay rental payments and oil royalties when production is obtained. Average freehold royalties may range from 12 1/2 to 17% of gross production sales value. It is estimated that gross royalties payable to freehold mineral owners in 1983 exceeded $16 million (before payment of provincial and federal taxes) and does not include signing bonuses and delay rental payments for new and non-producing leases.

Geophysical Activity

Fourteen geophysical licenses were issued in 1983. It is estimated that programs covered approximately 3 875 km, making 1983 one of the most active years for geophysical exploration activity in the Province's history. The estimated cost of these programs was $4.2 million, representing a 132% increase over actual 1982 program costs.

The level of geophysical activity is generally indicative of expected drilling activity. If this holds true, it may be expected that drilling activity in 1984 will be similar to that in 1983.

In 1983, geophysical programs were carried out in the following areas of the province: Daly, Elva, Tilston, North Tilston, Goodlands, Whitewater, Waskada, Hartney, Oak Lake, Kirkella, Bede, Pierson, Mountainside, Virden, Souris, and Napinka.

MANITOBA GEOPHYSICAL ACTIVITY SUMMARY

1973-1983

YEAR	LICENSES ISSUED	# OF KILOMETRES RUN (km)	TOTAL PROGRAM COSTS $
1973	0	0	0
1974	0	0	0
1975	1	270	106,500
1976	3	112	118,302
1977	2	830	1,046,220
1978	5	1,828	3,451,370
1979	10	2,001	2,970,734
1980	10	851	1,843,438
1981	11	1,142	2,116,854
1982	19	879	1,805,512
1983	14	3,875*	4,200,000*

* Estimate

In addition to these smaller programs, one large program covering approximately 2 300 kilometres provided more regional information on southwestern Manitoba.

Drilling Activity

In 1983, 27 different oil companies had wells drilled in Manitoba's oil patch, resulting in a 42% increase over the number of companies drilling wells in 1982. Fourteen drilling contractors with 24 drilling rigs drilled 247 wells, for a total depth of 229 304 metres. Drilling activity in 1983 surpassed 1982 levels by 27% and 1981 levels by 298%. Of the total number of wells completed in 1983, 190 were classified as development wells, while the remaining 57 were exploratory.

The success rate of wells drilled was also very high. Ninety percent (223 wells) of the 247 wells drilled were completed as potential oil wells. Three oil companies accounted for 56% of all wells drilled: Omega Hydrocarbons Limited (97 wells or 39%), New Scope Resources Limited (26 wells or 11%) and Roxy Petroleum Ltd. (16 wells or 6%). These same companies also accounted for the majority of drilling in 1982.

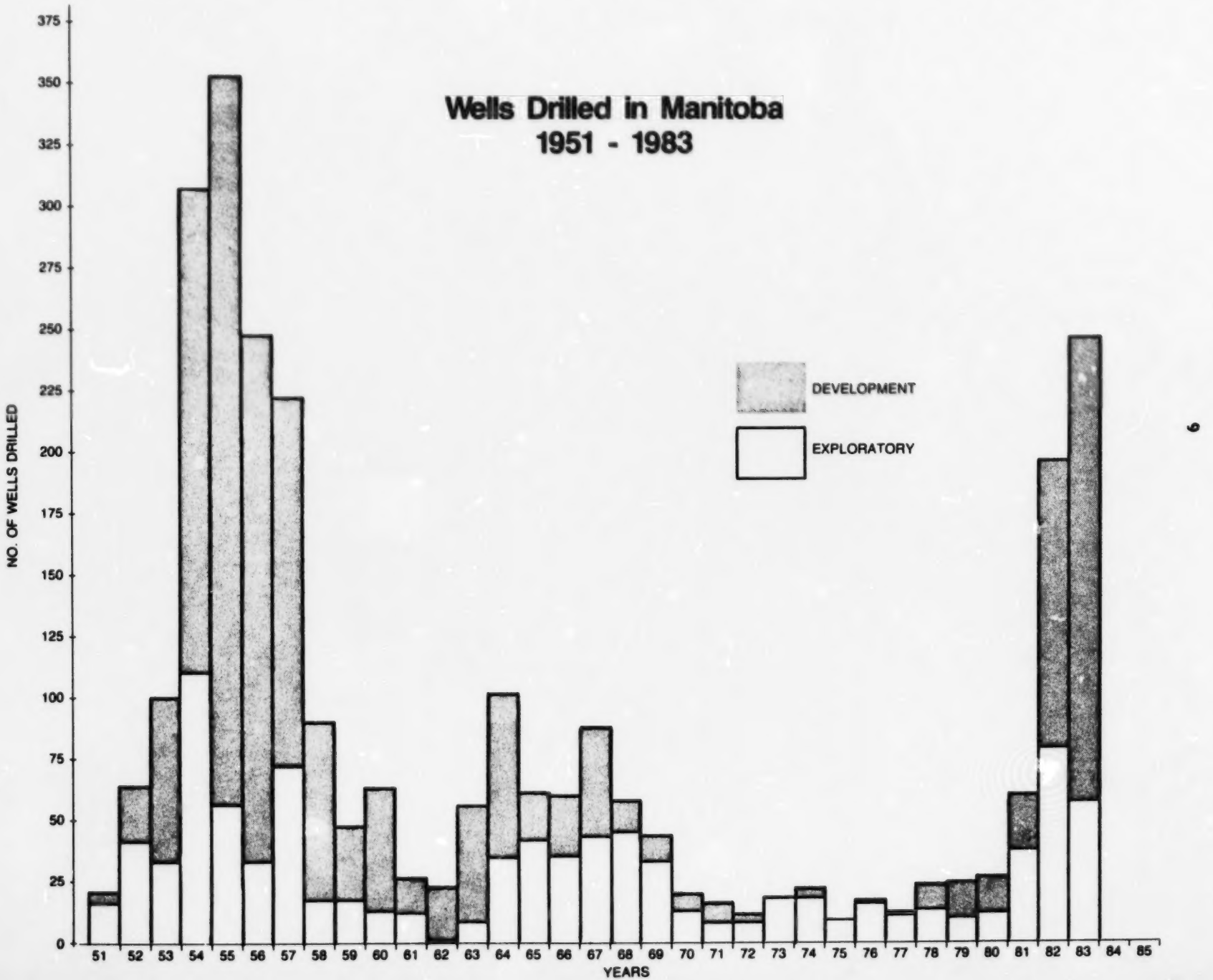
For the third successive year most of the drilling activity in the province took place in the Waskada area, (56% or 138 wells). Most of the remaining 109 wells were located in the Pierson, Daly, Virden, Coulter, Tilston, and Whitewater areas.

Several companies are showing new or renewed interest in the St. Lazare, Daly, Pierson and Oak Lake areas of the province, which may stimulate more drilling activity in 1984.

DRILLING ACTIVITY 1951-1983

YEAR	OIL AND GAS WELLS								OTHER WELLS DRILLED			
	NO. OF WELLS LICENSED	NO. OF WELLS DRILLED	CLASSIFICATION OF WELLS DRILLED		COMPLETED STATUS		SERVICE	METRES DRILLED	STH	PTH	GSW	Helium
			E	D	POTENTIAL OIL	ABANDONED DRY						
1951	20	18	14	4	6	10	2	14 956	103	0	0	0
1952	74	68	40	28	25	33	10	58 344	33	0	0	0
1953	119	102	31	71	73	29	0	76 682	9	0	0	0
1954	340	310	114	196	217	90	3	233 170	0	0	0	0
1955	378	354	57	297	279	66	9	254 774	5	0	0	0
1956	269	248	30	218	202	38	8	176 994	14	0	0	0
1957	225	224	71	153	139	85	0	155 469	2	0	0	0
1958	92	92	16	76	61	31	0	60 430	0	0	0	0
1959	48	47	16	31	30	17	0	30 792	0	2	0	0
1960	65	66	12	54	50	15	1	43 918	0	0	0	0
1961	25	28	11	17	11	16	1	17 389	0	1	0	0
1962	28	24	3	21	15	9	0	17 683	0	0	0	2
1963	59	57	9	48	39	16	2	43 451	0	0	0	0
1964	107	104	32	72	68	35	1	75 303	0	3	0	0
1965	69	65	40	25	27	38	0	50 298	2	8	0	0
1966	68	63	33	30	29	33	1	54 863	5	4	0	0
1967	90	85	42	43	44	41	0	67 068	0	0	0	0
1968	61	59	44	15	27	32	0	48 840	2	0	1	0
1969	55	46	30	16	14	29	3	34 376	38	0	0	0
1970	17	18	13	5	2	16	0	16 253	1	0	0	0
1971	18	15	6	9	2	8	5	13 026	6	0	0	0
1972	10	9	6	3	0	7	2	6 778	1	0	0	0
1973	19	17	17	0	0	17	0	14 083	0	0	0	0
1974	21	21	17	4	6	14	1	22 710	1	0	0	0
1975	5	7	7	0	2	4	1	6 717	4	0	0	0
1976	14	14	13	1	3	11	1	11 161	0	0	2	0
1977	19	11	10	1	9	2	0	9 359	0	0	2	0
1978	16	22	12	10	10	6	6	18 329	0	0	0	0
1979	27	25	9	16	16	9	0	20 537	0	0	0	0
1980	27	27	12	15	18	9	0	23 508	0	6	0	0
1981	71	62	33	29	47	15	0	61 011	0	5	0	0
1982	201	195	78	117	164	30	0	184 291	0	0	0	0
1983	284	247	57	190	223	24	0	229 304	0	5	0	0
TOTAL	2,941	2,750	935	1,815	1,858	835	57	2 151 867	226	34	5	2

E - Exploratory; D - development; Service - water supply, waste disposal, water injection wells;
STH - Structure test hole; GSW - gas storage well; PTH - potash test hole.
*"Other Wells Drilled" are not included in the Number of Wells Licensed, Number of Wells Drilled, or Metres Drilled columns.


Wells Drilled in Manitoba
1951 - 1983
NO. OF WELLS DRILLED
YEARS
DEVELOPMENT
EXPLORATORY
0
25
50
75
100
125
150
175
200
225
250
275
300
325
350
375
51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85

The drilling and exploration activity away from Waskada indicates that interest from the successful Waskada oil play is spreading to other areas of the province.

Production

Annual oil production in Manitoba reached 738 300 m^3 (4.65 million barrels) in 1983, representing a 27% increase over 1982 and a 36% increase over 1981 production. For the second consecutive year since 1968, oil production has increased.

Oil production had been declining at approximately 3.5% per year from 1969 to 1981. The increased oil output since 1982 can be attributed mainly to the successful and continuing development of the Waskada area.

Production from the Waskada area increased from 85 666 m^3 (540,000 barrels) in 1982 to 240 164 m^3 (1.5 million barrels) in 1983, an increase of 178%. Currently, (December 1983), the average daily production from this area is approximately 800 m^3 (5,000 barrels).

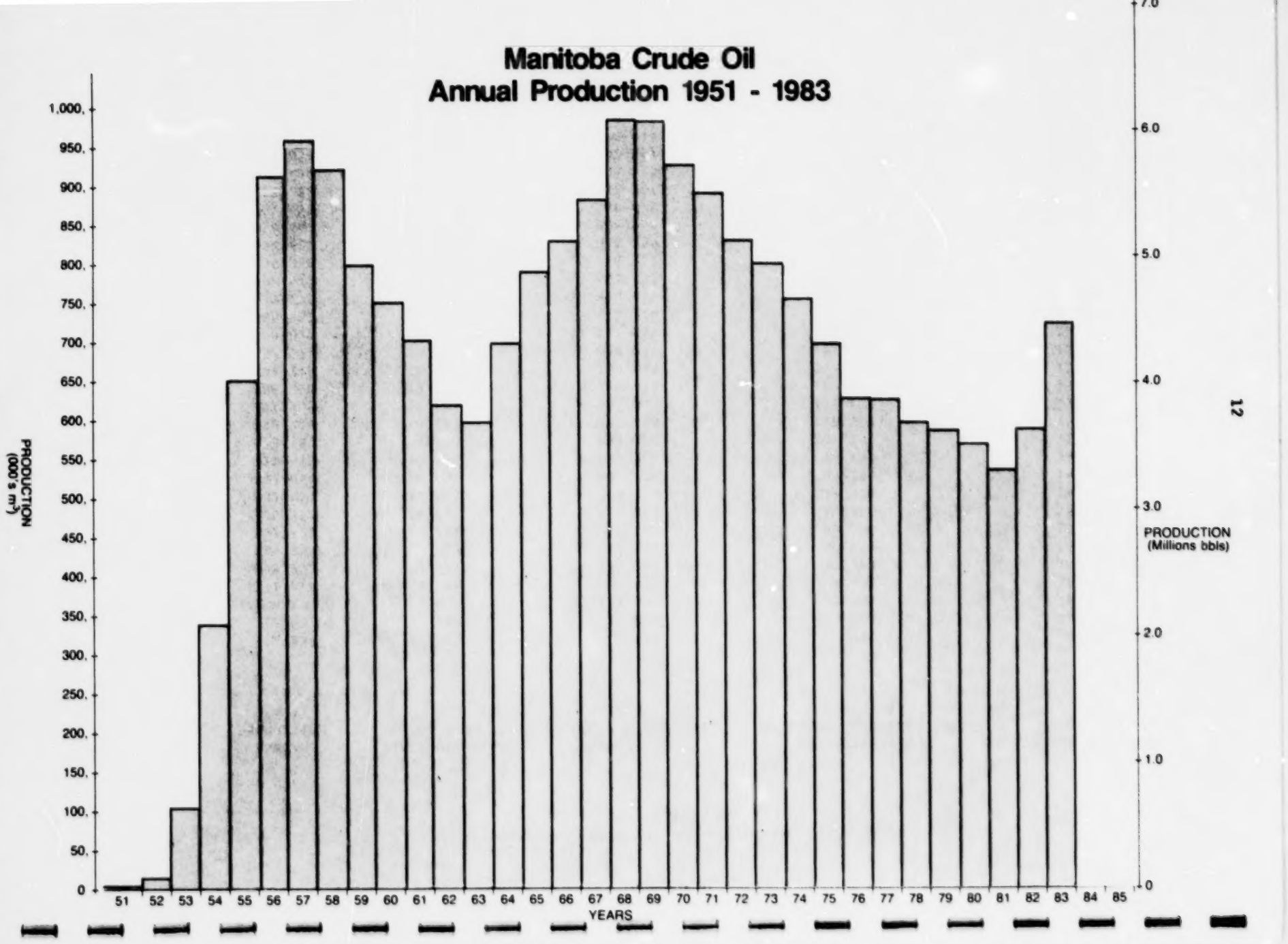
In 1983, 292 750 m^3 (40% of total production) was classified as "New" oil and of this total, approximately 80% was produced from the Waskada Field.

In December 1983 approximately 60% of the oil production in Manitoba was classified as "Old" oil whereas in 1982 "Old" oil accounted for 81% of total production. This trend of a decline in "Old" oil production, as "New" oil production increases its share of total production, is expected to continue.

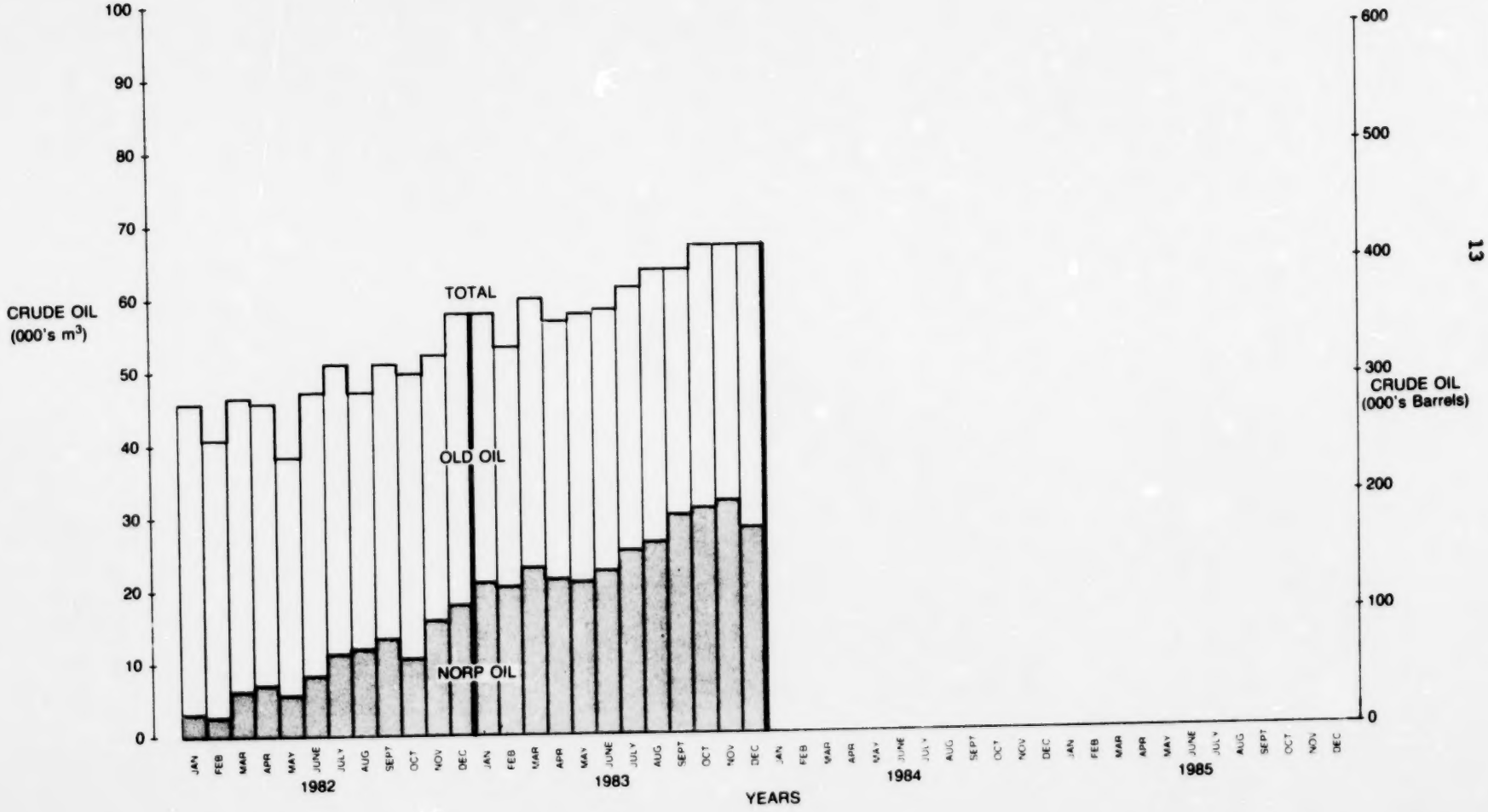
MANITOBA CRUDE OIL PRODUCTION AND SALES VALUE
1951-83

YEAR	ANNUAL PRODUCTION (m^3)	VALUE OF SALES (000's $)	CUMULATIVE PRODUCTION DEC. 31 (m^3)	CUMULATIVE VALUE OF SALES (m^3) (Dec. 31) (000's $)	AVERAGE WELLHEAD PRICE (m^3)
1951	1 854	25	1 854	25	15.88
1952	17 022	182	18 876	207	14.08
1953	104 193	1,658	123 069	1,865	16.54
1954	341 410	5,566	464 479	7,431	16.65
1955	658 802	9,517	1 123 281	16,948	14.56
1956	919 539	13,417	2 042 820	30,365	14.61
1957	967 721	15,231	3 010 541	45,596	15.81
1958	926 322	14,265	3 936 863	59,860	15.40
1959	803 461	11,615	4 740 324	71,475	14.46
1960	757 054	10,690	5 497 378	82,166	14.16
1961	711 813	10 133	6 833 180	92,299	14.26
1962	623 989	9,500	6 833 180	101,799	15.12
1963	599 276	9,183	7 432 456	110,982	15.33
1964	701 909	10,694	8 134 365	121,676	15.31
1965	786 050	12,270	8 920 415	133,946	15.59
1966	831 248	13,087	9 751 663	147,033	15.73
1967	887 572	13,974	10 639 235	161,007	15.77
1968	986 024	15,561	11 625 259	176,568	15.79
1969	985 981	15,615	12 611 240	192,183	15.82
1970	939 175	14,858	13 550 415	207,041	15.80
1971	890 622	15,445	14 441 037	222,486	17.31
1972	835 380	14,586	15 276 417	237,073	17.46
1973	807 882	17,155	16 084 299	254,228	1.23
1974	754 667	27,182	16 838 966	281,409	36.00
1975	701 459	31,453	17 540 425	312,862	44.81
1976	633 322	33,533	18 173 747	346,395	52.99
1977	630 466	40,457	18 804 213	386 852	64.12
1978	598 354	45,953	19 402 567	432,805	76.77
1979	583 377	48,403	19 985 944	481,208	82.96
1980	563 482	54,948	20 549 426	536,157	97.52
1981	542 695	64,055	21 092 121	600 211	118.39
1982	582 223	100,540	21 674 344	700,751	174.00
1983	738 300	152,350	22 412 644	853,101	207.11

Manitoba Crude Oil
Annual Production 1951 - 1983



Total Monthly Crude Oil Production
1982 - 1983



Oil Prices

The price of "New" oil (D_2S_3 quality block) in January, 1983 was $\$274.03/m^3$ ($43.55 per barrel). "New" oil prices declined steadily throughout 1983 until November when prices increased for the first time since October 1982. "New" oil prices ended the year at $\$241.70/m^3$ ($38.41 per barrel).

Compared with 1982, "Old" oil prices were significantly higher. On January 1st, 1983, the selling price of "Old" oil (D_3S_4 quality block) increased by $\$36.23/m^3$ ($5.76 per barrel) to $\$184.65/m^3$ ($29.35 per barrel). By December 1983, "Old" oil prices had increased to $\$185.02/m^3$ ($29.40 per barrel).

Following the amendment of pricing agreements between the Government of Canada and the producing provinces, effective July 1, 1983, all wells previously qualifying for Special Oil Oil Prices began receiving supplements equal to the New Oil Reference Price.

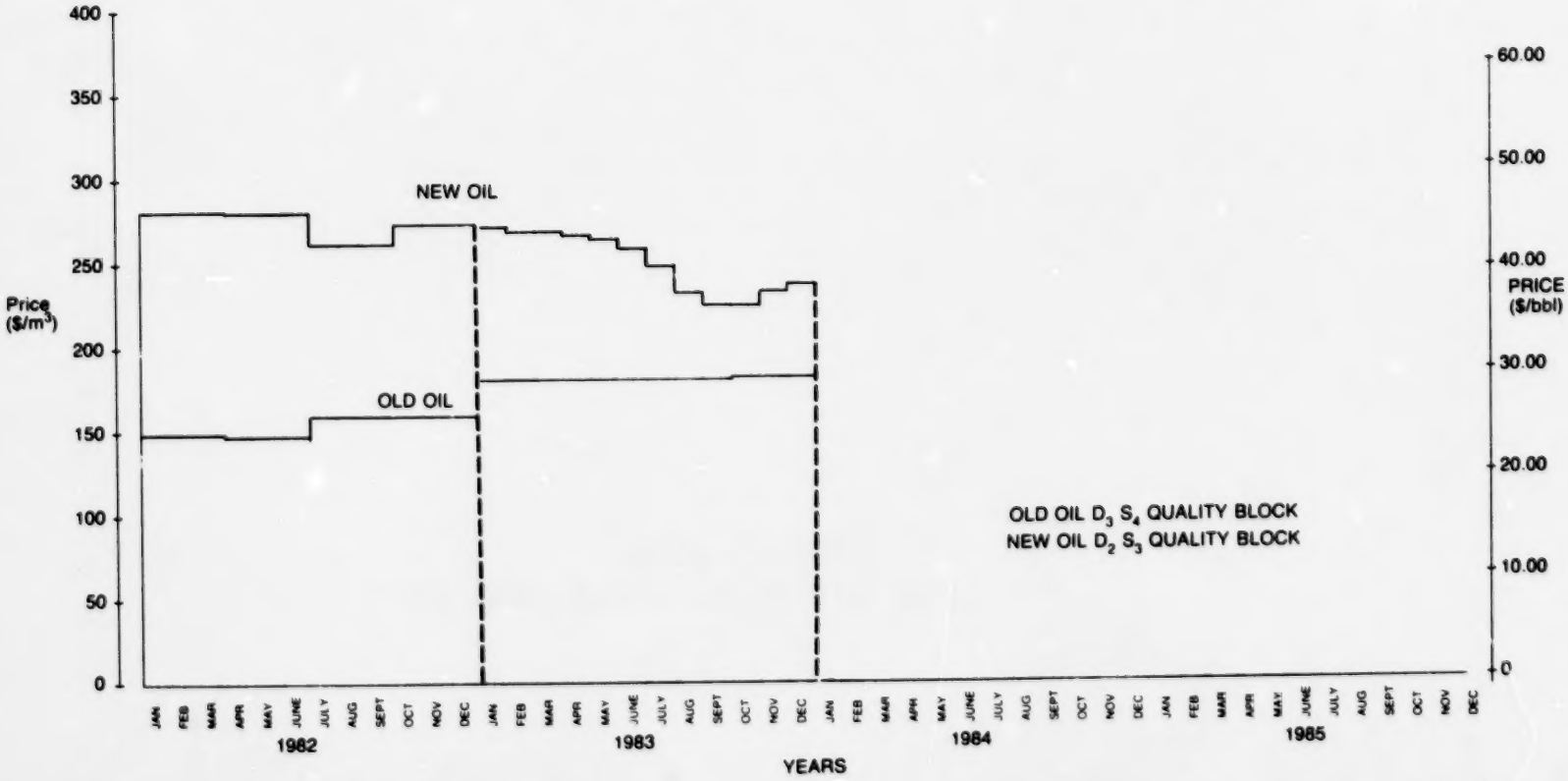
Value of Production

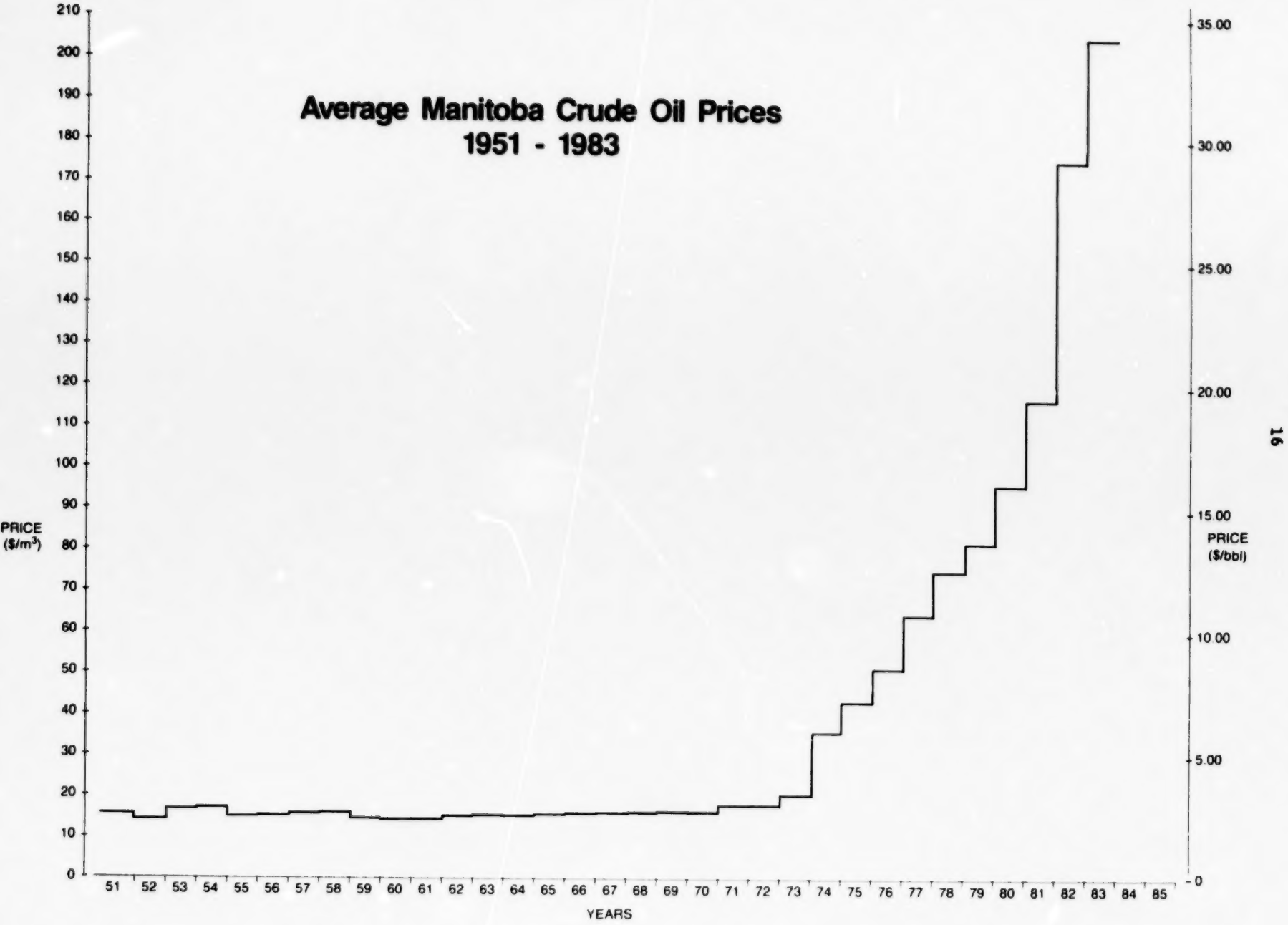
The total value of oil production during 1983 was $152.3 million, resulting in a 52% increase over 1982 production and a 138% increase over production in 1981. The main reasons for the increase were the increased production levels and higher "Old" oil prices.

Provincial Revenue from Oil Production

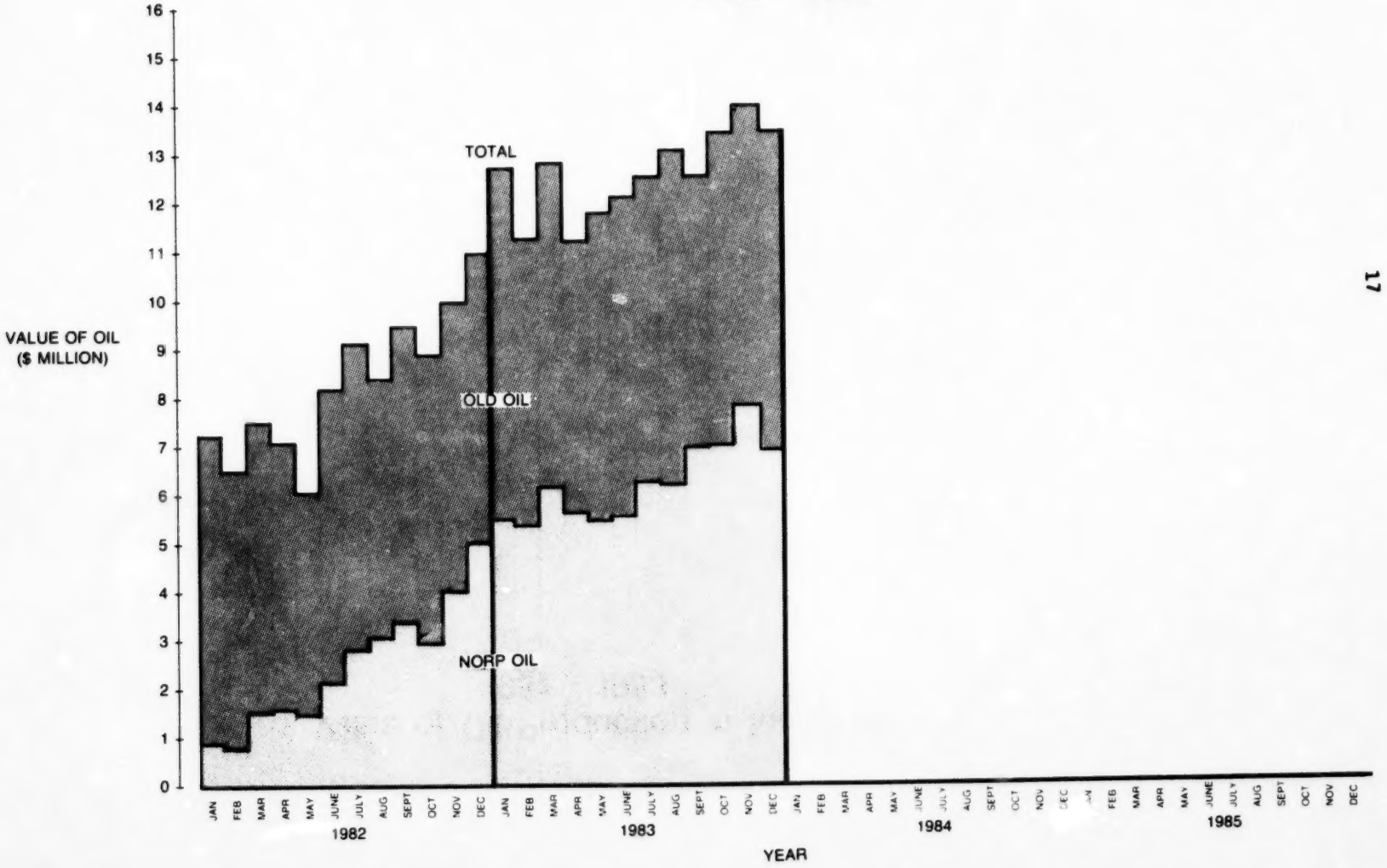
For a second consecutive year Provincial government revenues from oil production increased due to higher production levels and higher wellhead prices. The Manitoba government

Manitoba Crude Oil Prices
1982 - 1983

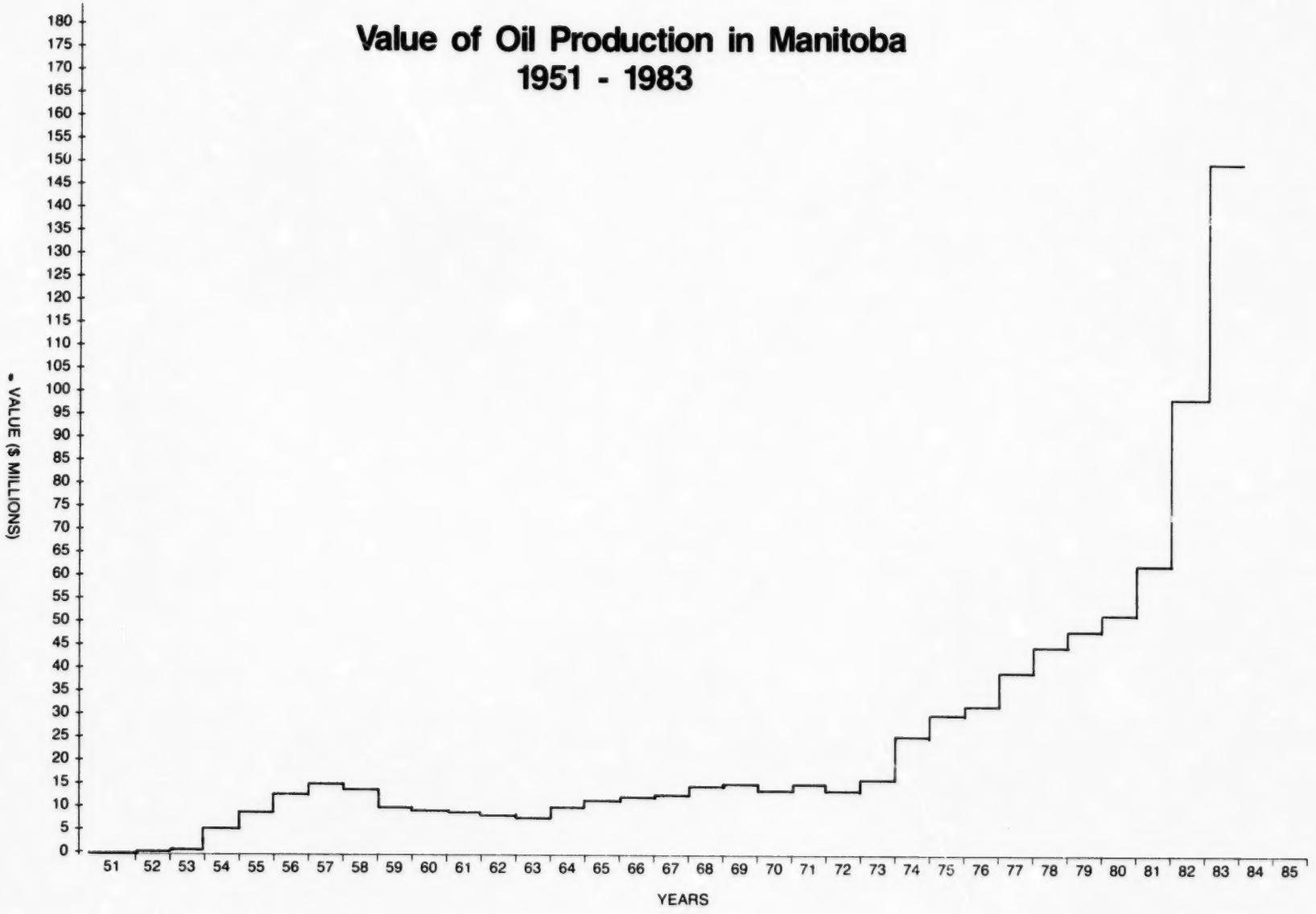



Average Manitoba Crude Oil Prices
1951 - 1983
PRICE ($/m³)
PRICE ($/bbl)
YEARS
0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180
190
200
210
0
5.00
10.00
15.00
20.00
25.00
30.00
35.00
51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85

Value of Monthly Production
1982 - 1983



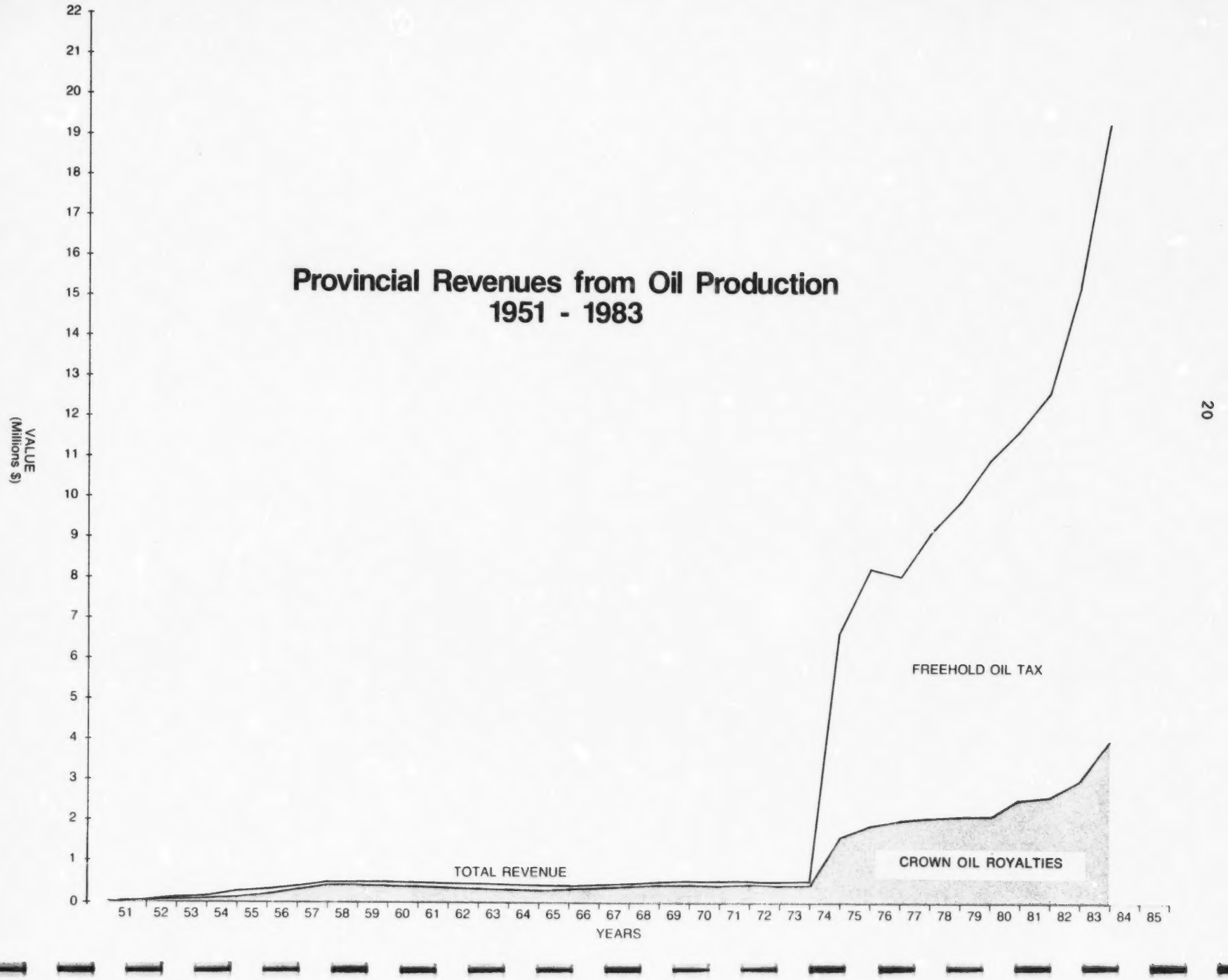
Value of Oil Production in Manitoba
1951 - 1983



PROVINCIAL REVENUES FROM OIL EXPLORATION AND DEVELOPMENT IN MANITOBA*
1951-1983

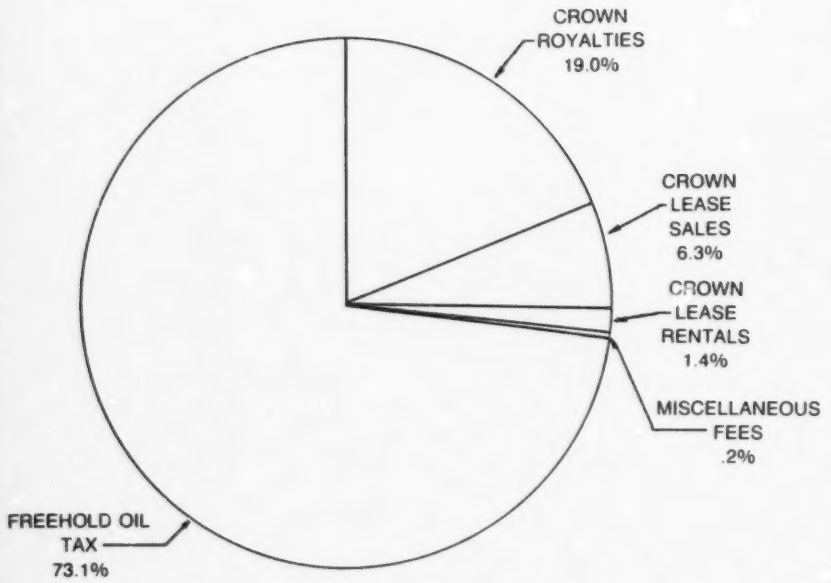
YEAR	CROWN ROYALTIES	FREEHOLD OIL TAX ($)**	CROWN LEASE*** RENTAL ($)	CROWN LAND**** SALES ($)	MISCELLANEOUS FEES ($)	TOTAL PROVINCIAL REVENUES ($)
1951	2,000	-	4,000	-	5,000	11,000
1952	7,000	-	7,000	-	9,000	23,000
1953	50,000	46,000	6,000	-	8,000	110,000
1954	156,000	64,000	18,000	88,000	24,000	350,000
1955	230,000	92,000	69,000	627,000	10,000	1,028,000
1956	318,000	83,000	512,000	156,000	18,000	1,087,000
1957	382,000	126,000	421,000	110,000	-	1,039,000
1958	356,000	137,000	293,000	-	31,000	817,000
1959	344,000	165,000	201,000	14,000	2,000	726,000
1960	313,000	130,000	98,000	4,000	2,000	547,000
1961	306,000	105,000	93,000	135,000	5,000	644,000
1962	298,000	96,000	90,000	26,000	10,000	520,000
1963	276,000	91,000	47,000	40,000	3,000	457,000
1964	307,000	86,000	35,000	122,000	23,000	573,000
1965	344,000	84,000	62,000	102,000	3,000	595,000
1966	353,000	96,000	60,000	94,000	3,000	606,000
1967	370,000	111,000	56,000	83,000	10,000	630,000
1968	411,000	116,000	39,000	60,000	14,000	640,000
1969	405,000	128,000	31,000	84,000	4,000	652,000
1970	377,000	143,000	28,000	15,000	1,000	564,000
1971	373,000	143,000	21,000	34,000	2,000	573,000
1972	348,000	138,000	16,000	-	1,000	503,000
1973	404,000	144,000	15,000	-	2,000	565,000
1974	1,599,000	5,216,000	15,000	-	4,000	6,834,000
1975	1,823,000	6,498,000	12,000	-	1,000	8,334,000
1976	2,024,000	6,128,000	11,000	-	11,000	8,174,000
1977	2,263,000	7,012,000	10,000	-	3,000	9,288,000
1978	2,281,000	8,018,000	10,000	-	6,000	10,315,000
1979	2,280,000	8,769,000	44,000	944,000	12,000	12,049,000
1980	2,575,000	9,159,00	128,000	1,884,000	11,000	13,757,000
1981	2,715,000	10,005,000	186,000	1,692,000	12,000	14,610,000
1982	3,176,000	12,194,000	231,000	1,058,000	28,000	16,687,000
1983	4,138,000	15,308,000	270,000	1,076,000	59,000	20,851,000
TOTAL	31,603,000	90,631,000	3,140,000	8,448,000	337,000	134,159,000

* Does not include corporate capital tax, sales tax, corporate and individual income tax or oil export tax.
** Administered under The Oil and Natural Gas Tax Act, Cap.035.
*** Includes only Rental Fees.
**** Includes Bonus and Application Fees.


Provincial Revenues from Oil Production
1951 - 1983
VALUE
(Millions $)
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
TOTAL REVENUE
FREEHOLD OIL TAX
CROWN OIL ROYALTIES
51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85
YEARS

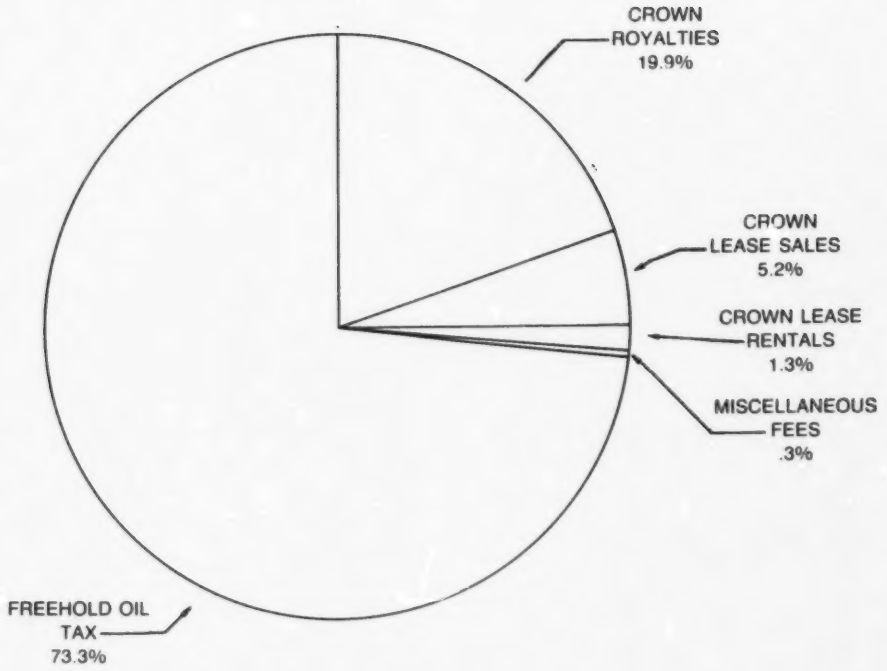
Provincial Revenues From Oil Exploration and Development in Manitoba 1982 - 1983

1982



TOTAL REVENUE
$16,687,000

1983



TOTAL REVENUE
$20,851,000

collected approximately $21.7 million in revenues ($4.2 million in Crown oil royalties, $15.3 million in freehold oil taxes, $1.1 million in Crown lease sale bonuses, rentals and fees, and $1.0 million in the province's share of crude oil export taxes) resulting in a 26% increase over 1982. These figures do not include provincial revenues in the form of corporate capital tax, sales tax, municipal tax and corporate and individual income tax.

Municipal Tax Revenue

Oil producers in Manitoba pay a municipal tax on wells and associated production facilities, including: oil wells, batteries, salt water disposal wells, salt water disposal plants, water injection wells, and suspended wells.

The municipal assessment on these facilities for the period from September 1982 to September 1983 was approximately $4.75 million dollars.

In addition to the municipal tax paid by oil producers, pipeline companies have been assessed at approximately $350,000.

Surface Owners

Companies wishing to explore or develop oil properties in Manitoba must negotiate a surface lease with the individual landowner. In return for this right-of-entry, the landowner receives a negotiated cash settlement which includes a first-year bonus payment and a subsequent annual rental fee for the duration of the lease.

Where the landowner is renting his land to another party, the oil company seeking right-of-entry must obtain the consent of both the landowner and the occupant.

After a lease has been signed, the landowner and occupant then determine what each will receive as his share of the compensation paid by the oil company.

Following proclamation of The Surface Rights Act on August 9, 1983, disputes relating to right-of-entry are now referred to a six member Surface Rights Board which was appointed by the Minister of Energy and Mines on July 28, 1983. The Board's principal function is to arbitrate disputes between the petroleum industry and landowners regarding use of land for exploration, development and related operations and to determine what compensation should be paid to the landowner. The Board's office is located in Virden.

In 1983, an estimated $2.4 million was paid by oil companies to landowners in the form of first-year bonuses ($1.0 million) and annual rental fees ($1.4 million).

Oil Price Supplement Programs

New Oil Reference Price (NORP) Program:

The NORP program which became effective on January 1, 1982, continued during 1983 and as New Oil production levels increased, the total value of NORP supplements also increased. This program was introduced and implemented in Manitoba as a result of oil pricing and taxation negotiations between the Governments of Manitoba and Canada in December 1981.

The NORP program works in the following manner: Operators producing "conventional new oil" sell their production at "old" oil prices to purchasers and later receive a NORP supplement funded by the Government of Canada. The NORP supplement, together with the price for "old" oil, makes the amount received for NORP production equal to the world oil price.

The Petroleum Branch of the Manitoba Department of Energy and Mines administers the NORP program in Manitoba.

As of December 31, 1983, 292 wells were eligible for NORP supplements, an increase of 79% over the 163 wells eligible in December, 1982. In 1983 NORP supplements amounted to $17.9 million or 12% of the total value of provincial oil production. Compared with 1982, the value of NORP supplements increased by 54% in 1983.

Special Old Oil Price (SOOP) Program:

The SOOP program continued to operate until July 1983 at which time all wells qualifying for SOOP supplements became eligible to receive SOOP supplements equal in value to NORP supplements. This came about as the result of amendments to pricing agreements between the Federal Government and producing provinces, effective July 1, 1983.

As of December 31, 1983, production from 23 wells was eligible to receive the Special Old Oil Price. During 1983 a total of $245,800 was paid out in SOOP supplements.

Summary of Manitoba New Oil Reference Price (NORP) Program - 1983

MONTH	NO. OF COMPANIES CLAIMING	NUMBER OF WELLS CLAIMED	NORP PRODUCTION CLAIMED (m^3)	NORP SUPPLEMENT CLAIMED ($)	TOTAL VALUE OF PRODUCTION* ($)
January	11	176	19 295	1,648,574	12,833,405
February	16	191	19 413	1,589,364	11,371,962
March	17	202	22 138	1,804,553	12,970,637
April	19	198	20 614	1,609,890	11,339,164
May	19	210	19 995	1,484,107	11,867,642
June	17	226	21 153	1,482,768	12,204,433
July	19	246	24 671	1,476,193	12,643,777
August	19	264	25 147	1,237,636	13,255,548
September	19	285	29 760	1,281,124	12,626,620
October	19	290	30 238	1,241,371	13,576,949
November	21	325	32 302	1,558,455	14,088,098
December	16	292	28 022	1,437,709	13,571,537
TOTAL:	N/A	N/A	292 748	17,851,744	152,349,772

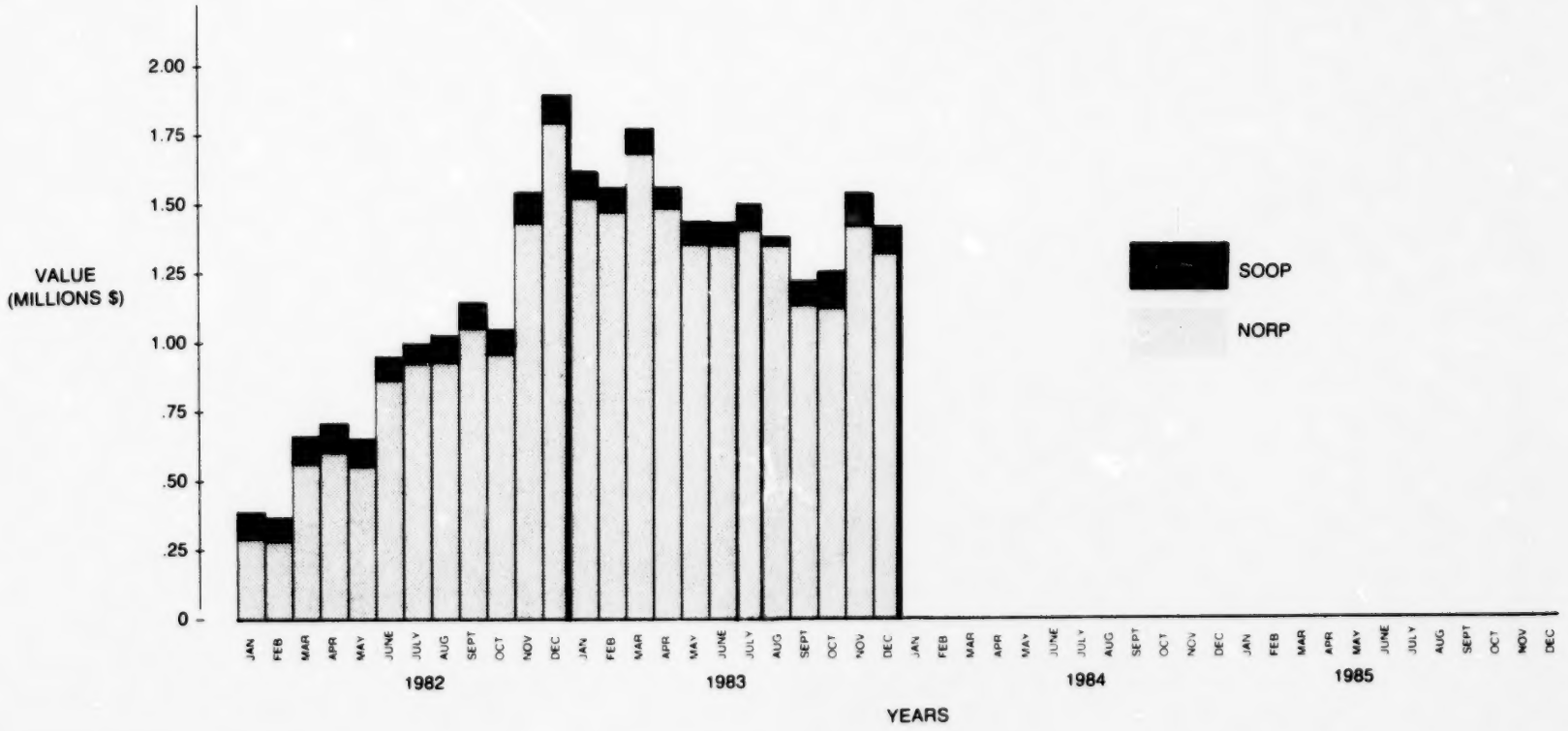
*Includes SOOP and NORP supplements

Summary of Manitoba Special Old Oil Price (SOOP) Program - 1983

MONTH	NO. OF COMPANIES CLAIMING	NO. OF WELLS CLAIMED	SOOP PRODUCTION CLAIMED (m^3)	SOOP SUPPLEMENT CLAIMED ($)
January	11	30	1 008	13,022
February	11	28	744	3,952
March	8	25	902	4,633
April	9	26	752	2,650
May	10	27	842	1,103
June	6	16	492	450
July*	7	24	769	39,187
August	10	30	1 282	54,898
September	9	31	844	31,158
October	9	27	881	30,891
November	9	26	674	28,228
December	6	23	787	35,642
TOTAL:	N/A	N/A	9 977	245,814

* As of July, 1983 value of SOOP supplement equivalent to value of NORP supplement.

Value of Manitoba New Oil Reference Price (NORP) and Special Old Oil Price (SOOP) Supplement Programs 1982 - 1983



Manitoba Drilling Incentive Program

The "Manitoba Drilling Incentive Program" provides for reduced Crown oil royalty and freehold oil tax rates on oil produced from new wells. Wells drilled between January 1, 1979 and January 1, 1987, and producing from Crown mineral rights may qualify for a special reduced royalty incentive rate which is 35% of the corresponding base royalty rate charged on "old oil".

New wells producing from freehold mineral rights are eligible for a corresponding incentive freehold oil tax rate under The Oil and Natural Gas Tax Act.

The reduced royalty and tax rates apply to production from a new oil well during its respective incentive period.

The incentive period earned for wells producing from provincial Crown mineral rights is called the "royalty incentive period" (RIP) whereas wells producing from freehold mineral rights earn a "production incentive period" (PIP).

In 1983 approximately 30% of the 1160 wells capable of producing oil in the Province were operating under an incentive period (11% under RIP and 89% under PIP). Seventy-six per cent of the 348 incentive wells in the province are located in the Waskada area.

It is estimated that since the program was implemented in 1979, the value of the incentive to industry has been in excess of $5.5 million.

The Manitoba Drilling Incentive program has been instrumental in attracting oil companies to Manitoba over the

past five years. The extension of the program to include wells drilled up to January 1, 1987, keeps Manitoba's royalty and tax rates competitive with those in other oil producing provinces.

Oil Reserves

From 1973 to 1980, remaining established oil reserves in Manitoba declined at a rate of approximately 5% per year due to production and lack of new discoveries.

This trend began to reverse in 1980 as new discoveries were made in the Kirkella area. New discoveries in the Waskada area in 1981 further arrested the decline and as a result of additional development in the area in 1982 and 1983 reserves increased. This increase in the Province's remaining established reserves followed more than 16 years of decline.

As of December 31, 1983, the province's total remaining established crude oil reserves were estimated to be 8.15 million m^3 (51 million barrels).

1984 Forecast

Manitoba is expected to see a similar level of exploration and development activity during 1984. Several reasons support this statement:

the high success rate in the Waskada area should continue to provide an incentive for relatively lower risk and less costly development drilling;

the continuation of the Manitoba Drilling Incentive Program to the end of 1986 will provide oil producers with netbacks competitive with other oil producing provinces;

CRUDE OIL RESERVES IN MANITOBA
1973-1983

YEAR	PRODUCTION (m^3)	ESTABLISHED RESERVE ADDITIONS (m^3)	REMAINING ESTABLISHED RESERVES (m^3)	YEARS TO DEPLETION*
1973	807 882	Nil	11 798 000	14.60
1974	754 667	15 000	11 059 000	14.65
1975	701 459	4 000	10 362 000	14.77
1976	633 322	7 000	9 735 000	15.37
1977	630 466	15 000	9 120 000	14.46
1978	598 354	22 000	8 543 000	14.28
1979	583 377	24 000	7 984 000	13.64
1980	563 482	314 000	7 735 000	13.73
1981	542 695	544 000	7 736 000	14.25
1982	582 322	733 000	7 927 000	13.60
1983	738 300	954 000	8 154 000	11.04

* Remaining Established Reserves ÷ Annual Production

discoveries in Manitoba are likely to be oil rather than less marketable natural gas and will receive the equivalent of world oil prices;

the significant amount of geophysical activity in 1983 could spark new or renewed interest in several areas of the province; and

expiring leases will either prompt drilling or free up additional lands for other interested developers.

Because of these factors, it is estimated that 200 wells will be drilled during 1984, and of this number, it is possible that 150-180 new oil wells will be placed on production.

With more wells on production, an increase in total oil production is also forecast. Approximately 850 000 m^3 of oil (5.3 million barrels) could be produced in Manitoba this year, resulting in a 15% increase over 1983 production.

Although "old" oil production will continue to decline through 1983, the amount of NORP oil production is expected to steadily increase from 40% of total production in December 1983 to about 55% of total production in December 1984.

As production levels increase so will the value of oil sales. In 1984, the value of oil could reach $180 million representing a 20% increase over 1983. Concurrently, Crown oil royalties could approach $4.5 million in 1984 while freehold oil taxes could generate approximately $16.0 million.

With further development of the Waskada area and continued drilling activity in other areas, the province's established oil reserves are likely to increase again for a third consecutive year.

Other areas that may see increased geophysical and drilling activity include the Oak Lake, St. Lazare, Daly, Tilston, and Pierson areas. Several oil and gas companies have become interested and active in these areas.

MANITOBA OIL FIELDS - 1983

	DALY	TILSTON	WASKADA	LULU LAKE	VIRDEN	WHITE-WATER	PIERSON	W.BUTLER	KIRKELLA	SOURIS HARTNEY	OTHER AREAS	TOTAL
DISCOVERY YEAR	1951	1952	1952	1953	1953	1953	1954	1955	1957	1962	N/A	N/A
AVG. DEPTH TO PRODUCING FORMATION (m)	769	945	923	1 000	630	785	1003	840	738	655	N/A	N/A
PRODUCING FORMATION	L	MC	MC,LAm	L	L	L	MC	L	L	L	LAm, MC, L	N/A
WELL SPACING (ha)	16	16	16	16	16	16	16	16	16	32	16	N/A
OIL QUALITY	D3S4	D3S3	D2S3 D3S3	D3S3	D3S4	D3S3 D3S4	D2S3 D3S4	D3S4	D5S6	D4S4	N/A	N/A
WELLS CAPABLE OF OIL PRODUCTION (DEC. 1983)	165	13	261	5	575	13	33	2	38	8	47	1 160
OIL WELLS PRODUCING (DEC. 1983)	133	9	241	5	539	12	27	2	35	6	32	1 041
1983 OIL PRODUCTION (m^3)	67 310	4 339	239 866	1 833	375 531	5 881	10 717	499	16 182	2 694	13 449	738 301
CUMULATIVE OIL PRODUCTION (DEC. 31/83) (m^3)	3 564 552	77 436	457 793	35 557	17 540 717	80 096	263 118	29 911	194 214	125 010	44 298	22 412 702
REMAINING ESTABLISHED RESERVES (DEC. 31, 1983) (m^3)	864 280	12 700	1 355 810	14 330	5 445 100	9 980	186 990	4 310	34 930	35 090	191 060	8 154 580

L = Lodgepole
LAm = Lower Amaranth
MC = Mission Canyon